

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

1. (Previously Presented) A method for use with an integrated circuit that is light-sensitive, the method comprising:

applying different wavelengths of light to the integrated circuit, the integrated circuit producing output signals in response to the different wavelengths of light, the integrated circuit comprising a storage medium, the storage medium comprising at least one of a Zener diode, a fuse, or an electrically erasable programmable read-only memory;

measuring the output signals to obtain measured values;

comparing the measured values to setpoint values that correspond to the different wavelengths of light;

obtaining correction values for the different wavelengths of light, the correction values being based on comparison of the measured values to the setpoint values; and

storing the correction values on the storage medium of the integrated circuit;

wherein the integrated circuit is on a semiconductor substrate;

wherein the method is performed using a testing card for integrated circuits;

wherein testing needles form contacts between the testing card and the integrated circuit, and wherein the testing needles are for placement on contact areas of the integrated circuit for storing data on the integrated circuit; and

wherein the different wavelengths of light are applied via light-emitting diodes that are mounted atop the testing card.

2 to 4. (Cancelled)

5. (Previously Presented) The method of claim 17, further comprising:  
obtaining the sensitivity curve by interpolating between the measured values; and  
storing information about the sensitivity curve on the integrated circuit.

6. (Previously Presented) The method of claim 1, wherein the integrated circuit comprises one or more photodiodes.

7. (Previously Presented) The method of claim 1, wherein the correction values are stored using Zener diodes on the integrated circuit.

8. (Currently Amended) A semiconductor chip comprising:

a semiconductor substrate comprising silicon;

a light-sensitive integrated circuit that stores ~~information~~ correction data for use in correcting a wavelength-dependent output signal of the light-sensitive integrated circuit, the wavelength-dependent output signal being an electrical signal; and

a temperature sensor for measuring a temperature of an external light source that illuminates the light-sensitive integrated circuit, the light-sensitive integrated circuit for producing the wavelength-dependent output signal in response to light from the external light source;

wherein the ~~light-sensitive integrated circuit stores~~ correction data ~~that~~ is derived using the temperature of the external light source, ~~the correction data for use in correcting the wavelength-dependent output signal~~, the light-sensitive integrated circuit comprising a storage medium for storing the correction data, the storage medium comprising at least one of a Zener diode, a fuse, or an electrically erasable programmable read-only memory; and

wherein the light-sensitive integrated circuit and the temperature sensor are both on the semiconductor substrate.

9. (Cancelled)

10. (Currently Amended) A method for use with an integrated circuit that is light sensitive, the method comprising:

illuminating the integrated circuit using an external light source, the integrated circuit comprising a photodiode and producing an output signal in response to light from the external light source;

providing, to the integrated circuit, information about the wavelength of the light from the external light source;

measuring a temperature of the external light source using a temperature sensor;

correcting the information about the wavelength of the light using the temperature to thereby produce corrected information; and

correcting the output signal using the corrected information, the output signal being an electrical signal, and the output signal being corrected based on a sensitivity of the photodiode and based on a temperature dependence of the external light source;

wherein ~~a semiconductor chip comprises~~ the integrated circuit and the temperature sensor are both on a semiconductor substrate, the semiconductor substrate comprising silicon.

11. (Cancelled)

12. (Previously Presented) The method of claim 10, wherein the information comprises a correction value that corresponds to the wavelength of light.

13. (Previously Presented) The method of claim 12, wherein the correction value comprises a difference between a setpoint value and the output signal at the wavelength.

14. (Canceled)

15. (Previously Presented) The semiconductor chip of claim 8, wherein the light-sensitive integrated circuit comprises one or more photodiodes for receiving different wavelengths of light.

16. (Canceled)

17. (Previously Presented) The method of claim 1, wherein the measured values define a sensitivity curve; and

wherein a smallest interval between two of the different wavelengths on the sensitivity curve is smaller than an interval between a relative maximum and a relative minimum on the sensitivity curve.

18. (Previously Presented) The semiconductor chip of claim 8, wherein the light-sensitive integrated circuit has a wavelength dependent sensitivity; and

wherein a smallest interval between two measured wavelengths of the wavelength-dependent output signal is smaller than an interval between a relative maximum and a relative minimum on a sensitivity curve defined, in part, by the two measured wavelengths.

19. (Previously Presented) The method of claim 10, wherein the integrated circuit has a sensitivity that is wavelength-dependent; and

wherein a smallest interval between two measured wavelengths of the output signal is smaller than an interval between a relative maximum and a relative minimum on a sensitivity curve defined, in part, by the two measured wavelengths.

20. (Previously Presented) The method of claim 1, wherein the testing card is configured so that the light-emitting diodes illuminate the integrated circuit that is below the testing card.

21. (Previously Presented) The method of claim 1, wherein the testing card comprises an opening at an illumination point of the integrated circuit.

22. (Previously Presented) The method of claim 1, wherein the testing needles are in contact with areas of the integrated circuit to absorb current generated in the integrated circuit.

Applicant : Thomas Mueller  
Serial No. : 10/526,097  
Filed : September 7, 2005  
Page : 8 of 14

Attorney's Docket No.: 14603-012US1  
Client Ref.: P2002,0713USN

23. (Previously Presented) The semiconductor chip of claim 8, wherein the storage medium is for permanently storing information.

24. (Canceled)